§ 70.300

- (ii) Nonproducing—activity has ceased.
- (iii) *Abandoned*—the dust generating source has been withdrawn and activity has ceased.

Subpart D—Respiratory Equipment

AUTHORITY: Title II, secs. 303(b), and 508, Federal Coal Mine Health and Safety Act of 1969 (83 Stat. 742; 30 U.S.C. 801); secs. 301(a) and 302(a), Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95–164, 30 U.S.C. 961 and 951 and 29 U.S.C. 577a, 91 Stat. 1317 and 91 Stat. 1319; sec. 508, Federal Mine Safety and Health Act of 1977, Pub. L. 91–173 as amended by Pub. L. 95–164, 30 U.S.C. 957, 83 Stat. 803.

SOURCE: 35 FR 5544, Apr. 3, 1970, unless otherwise noted.

§ 70.300 Respiratory equipment; respirable dust.

Respiratory equipment approved by NIOSH under 42 CFR part 84 shall be made available to all persons whenever exposed to concentrations of respirable dust in excess of the levels required to be maintained under this part. Use of respirators shall not be substituted for environmental control measures in the active workings. Each operator shall maintain a supply of respiratory equipment adequate to deal with occurrences of concentrations of respirable dust in the mine atmosphere in excess of the levels required to be maintained under this part.

[60 FR 30401, June 8, 1995]

§ 70.305 Respiratory equipment; gas, dusts, fumes, or mists.

Respiratory equipment approved by NIOSH under 42 CFR part 84 shall be provided to persons exposed for short periods to inhalation hazards from gas, dusts, fumes, or mist. When the exposure is for prolonged periods, other measures to protect such persons or to reduce the hazard shall be taken.

[60 FR 30401, June 8, 1995]

Subpart E—Dust From Drilling Rock [Reserved]

Subpart F—Noise Standard

§ 70.500 Definitions.

As used in this subpart F, the term: (a) *dBA* means noise level in decibels, relative to a reference level of 20 micro pascals, as measured by the use of an A-weighting and slow metering characteristic as specified in American National Standards Institute (ANSI), "Specification for Sound Level Meters," S1.4–1971 (Type S2A).

- (b) *Noise exposure* means a period of time during which the noise level is 90 or more dBA:
- (c) *Multiple noise exposure* means the daily noise exposure is composed of two or more different noise levels;
- (d) *Noise level* is the average dBA during a noise exposure; and,
- (e) Qualified person means, as the context requires, an individual deemed qualified by the Secretary and designated by the operator to make tests and examinations required by this Act.
- (f) Personal noise dosimeter means equipment worn by an individual, which performs noise level measurements along with exposure time measurements. The circuitry of the instrument is such that it automatically performs the computation of the multiple noise exposure specified in § 70.502.

(Sec. 101, Federal Mine Safety and Health Act of 1977, Pub. L. 91-173 as amended by Pub. L. 95-164, 91 Stat. 1291 (30 U.S.C. 811); sec. 301, Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95-164, 91 Stat. 1317 (U.S.C. 961)

[36 FR 12739, July 7, 1971, as amended at 43 FR 40761, Sept. 12, 1978; 44 FR 52827, Sept. 11, 1970]

§ 70.501 Requirements.

Every operator of an underground coal mine shall maintain the noise levels during each shift to which each miner in the active workings of the mine is exposed at or below the permissible noise levels set forth in Table I of this subpart.

Example: If a noise is recorded to be 110 dBA then exposure shall not exceed 30 minutes during an 8-hour shift.

(Secs. 101 and 206, 83 Stat. 745 and 765; 30 U.S.C. 801 and 846)

[36 FR 12739, July 7, 1971]

§ 70.502 Computation of multiple noise exposure.

The standard will be considered to have been violated in the case of multiple noise exposure where such exposure totals exceed one as computed by adding the total time of exposure at each specified level $(C_1, C_2, C_3 \text{ etc.})$ divided by the total time of exposure permitted at that level (T_1, T_2, T_3) . Thus, $[C_1/T_1]+[C_2/T_2]+[C_3/T_3]$ must not exceed 1

EXAMPLE I: Exposure of 2 hours at 92 dBA and 1 hour at 100 dBA during an 8-hour shift.

Total minutes of noise exposure at dBA level/Total minutes of permissible noise exposure at dBA level [120 min./360 min.+60 min./120 min.]=%6+%6=%6

The sum of the fractions does not exceed one; hence the exposure for the shift would not violate the standard.

EXAMPLE II: Exposure of 3 hours at 95 dBA and 1 hour at 100 dBA during an 8 hour shift.

3/4+1/2=3/4+2/4=5/4

The sum of the fractions exceeds one; hence the exposure for the shift would violate the standard.

(Secs. 101 and 206, 83 Stat. 745 and 765; 30 U.S.C. 801 and 846)

[36 FR 12739, July 7, 1971]

§ 70.503 Noise exposure measurements; general.

Every coal mine operator shall take accurate readings of the noise levels to which each miner in the active workings of the mine is exposed during the performance of the duties to which he is normally assigned.

(Sec. 101, Federal Mine Safety and Health Act of 1977, Pub. L. 91-173 as amended by Pub. L. 95-164, 91 Stat. 1291 (30 U.S.C. 811); sec. 301, Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95-164, 91 Stat. 1317 (30 U.S.C. 961))

[36 FR 12739, July 7, 1971, as amended at 43 FR 40761, Sept 12, 1978; 44 FR 52827, Sept. 11, 1979]

§ 70.504 Noise exposure measurements; by whom done.

The noise exposure measurements required by this subpart F shall be taken by, or as directed by, a person who has met the minimum requirements set forth in §70.504-1, and has been certified by the Assistant Secretary of Labor for Mine Safety and Health Administration as qualified to take noise exposure measurements as prescribed in this subpart F.

(Sec. 101, Federal Mine Safety and Health Act of 1977, Pub. L. 91-173 as amended by Pub. L. 95-164, 91 Stat. 1291 (30 U.S.C. 811); sec. 301, Federal Mine Safety and Health Amendments Act of 1977, Pub. L. 95-164, 91 Stat. 1317 (30 U.S.C. 961))

[36 FR 12739, July 7, 1971, as amended at 43 FR 12319, Mar 24, 1978; 43 FR 40761, Sept. 12, 1978; 43 FR 43458, Sept. 26, 1978; 44 FR 52827, Sept. 11, 1979]

§ 70.504-1 Persons qualified to measure noise exposures; minimum requirements.

The following persons shall be considered qualified to take noise exposure measurements as prescribed in this subpart F;

- (a) Any person who has been certified by the Mine Safety and Health Administration as an instructor in noise measurement training programs;
- (b) Any person who has satisfactorily completed a noise training course conducted by the Mine Safety and Health Administration and has been certified by the Administration as a qualified person; and,
- (c) Any person who has satisfactorily completed a noise training course approved by the Mine Safety and Health Administration and has been certified